

ARTIZONA



PUBLIC SERVICE COMPANY

P. O. BOX 21666 . PHOENIX, ARIZONA 85036

December 8, 1978 ANPP-12147-JMA/WFQ

Director of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Subject:

Palo Verde Nuclear Generating Station

Units 1, 2 & 3

Docket Nos. STN-50-528/529/530

Dear Sir:

Arizona Public Service Company (APS), as Project Manager and Operating Agent for Palo Verde Nuclear Generating Station (PVNGS) Units 1, 2 & 3 is submitting herewith for your review 60 copies of Amendment 19 of the PVNGS Units 1, 2 & 3 Preliminary Safety Analysis Report, Docket Nos. STN-50/528/529/530 pursuant to the requirements of 10CFR50.

This amendment provides a seepage analysis pursuant to Item 3.F.1(b) of the Construction Permits Nos. CPPR-141/142/143 for PVNGS Units 1, 2 & 3, respectively.

Amendment 19 will be served upon the Chief Executive of Maricopa County, Arizona, as required by 10CFR2.101. Proof of Service will be transmitted to you under separate letter.

18/2/907/

Soot B

• r

•

.

Director of Clear Reactor Regulation ANPP-12147-JIM/WFQ December 8, 1978 Page 2

Blue colored paper has been utilized for this printing to aid in identification of pages affected by Amendment 19.

Respectfully submitted, ARIZONA PUBLIC SERVICE COMPANY

Bv:

Edwin E. Van Brunt, Jr. APS Vice President Nuclear Projects ANPP Project Director

On its own behalf and as agent for all other joint applicants.

State of Arizona) ss. County of Maricopa)

Subscribed and sworn to before me this 27 day of

Notary Public

My Commission Expires:

My Commission Expires May 5, 1980

/ **>**

AMENDMENT NO. 19

INTRODUCTION

Amendment No. 19 to the Preliminary Safety Analysis Report for Palo Verde Nuclear Generating Station Units 1, 2 and 3 is comprised of insert pages which address those subjects for which a commitment was made in Amendment 17. In particular, this amendment presents the results of the seepage analysis and associated liquefaction analysis.

A change bar and number "19" identify new and amended text; shading identifies amended areas of illustrations. "Amendment 19" and the date "December 8, 1978" identify pages and figures changed by the amendment. The pages of this post-construction permit amendment are printed on blue-colored paper.

When an insert page in the Amendment has the same number as an existing page in the PSAR, the existing page has been superseded and should be deleted. Where an insert page does not duplicate an existing page, the insert page is new and should be placed in its proper location in the PSAR.

Those holders of the License Application should insert the transmittal letter, included herein, in the License Application.

INTRODUCTION

PVNGS Units 1,2&3	
Qualification	PVNGS Units 1,2&3
Review Letter Item Number	Amendments 17, 18 and 19 PSAR Reference
-	
A1 A2	2.4, 2.5, 2T 2.4
A3.la	2.5.1.2.2, 2Y, 2Z
A3.1b A3.1c	2.5.1.1.6, 2AA
A3.ld	
A3.le A3.2a	2.5.2.5
A3.2b	2.5.2.9.11
A3.3a A3.3b	2.5.4.10.2, 2AB
A3.3c	2.5.4.5.2
A4a A4b	
B.0	17.1A, 17.1B, 17.1C, 15.2, 12.3, 12A,
	6.2, 13.7, 3.2, 3J, 3.6, 11.4, 3.9, 9.2, 9.3, 9.4, 9.5, 6.4, 10.4, 3.10, 8.1, 8.2,
•	8.3, 3.11, 7.1, 7.2, 7.3, 7.4, 7.5, 4.2,
	5.2, 6.3, 6B, 3.8, 5.1, 2.1, 2.2, 2.4, 2.5, 2T, 3A, 12.1, 15.4, 1.1, 2Y, 2Z, 2AA,
B.1	2AB, 2AC, 5.6, 3.7, 13.1, 13.7 3.6, 3.8
B.2 .	17.1A, 17.1B
C1 C2	2.4, 2AC, 2AD, 2AE, 2AF, 2AG, 3.4, 2K 2.3.1.3.7 Amendment 14
Dl	
D2 E1-24	13.7 3J
E25	12.1
E26 E27	9.5.1, 9.5.3.2.2.3 3.11.4
E28	6.2.1
E29 E30	6.2.1.1.4 Rev. 0, 6.2 This information is required by
	Regulatory Guide 1.70 Rev. 2. PVNGS
	Units 1,2&3 are written to Regulatory Guide 1.70 Rev. 1. The information
	requested in item E30 is not required until the FSAR, however refer to PVNGS
	Units 1,2&3 section 6.2.1 amendment 17
	for the details of design and procedures available at this time. The remainder
	of the information will be provided in
E31	the FSAR. 5.1.5
E32	8.3.1, 3J
E33 E34	9.2.2 This item is in Combustion Engineering
	scope.

CHANGE PAGE LIST FOR AMENDMENT 19

Remove

Insert

17 sets Volume Table Contents xi through xxxiii Volume I through - XVII	of 17 sets Volume Table of Contents xi through xxxiii Volume I through XVII
2.4-81/82	2.4-81/81A
-	2-4-81B/82
2-4-82A/B	2-4-82A/B
2.4-82C/D	-2.4-82C/D
2.4-82E/F	2.4-82E/F
-2-4-82G/H	-2.4-82G/H
-2-4 -82I/J	2.4-82I/J
2.4-82K/L	-2.4-82K/L
2.4-82M/N	-2.4-82M/N
2.4-820/P	-2.4 -820/P
2.4-82Q/R	-2.4 -82Q/R
-2.4-82S/T	-2.4-82S/T
-	-2.4-82U/V
_	-2.4-82W/X
2.4-83/84	-2.4-83/84
2.4-84A/Z	2.4-84A/B
-	2.4-84C/D through Z
-2.4-125/126	-2.74-125/126
_2.4-127/127A	-2.4-127/127A
-2.4-130A/B	2.74-130A/B
2-4-135/136	2.4 -135/136

Remove	Insert
-	Fig 2.4-29e through g
• • • • • • • • • • • • • • • • • • •	Insert in Appendix 2K PV-172, PV-173, PV-173a, PV-174, PV-175, PV-176, PV-177, PV-178, PV-179, PV-180, PV-181, PV-182, PV-183, E18-1, E18-2, E18-3, E18-3a, E18-4; E18-5, E18-6
2T-42F, 2T-43	2T-42F, 2T-43
, -	Appendix 2AD Tab
-	Appendix 2AD
·	Appendix 2AE Tab
-	Appendix 2AE
-	Appendix 2AF Tab
-	Appendix 2AF
-	Appendix 2AG Tab
-	Appendix 2AG
3,7-29 through 3.7-39	3.7-29 through 3.7-38
3-8-65/3.8-66	3.8-65/3.8-66
3-8-66A/3.8-66B	-3.8-66A/3.8-66B
6.2-45D/6.2-46	6.2-45D/6.2-45E, 6.2-45F/6.2-46
6.2-62A/6.2-62B	6.2-62A
1/3-i/13-ii	1 3-i/13-ii
13.1-1/13.1-2, 13.1-3/ 13.1-4, 13.1-5/13.1-6, 13.1-9/13.1-10, 13.1-11/ 13.1-12, 13.1-15 through 13.1-23	13.1-23
Eig 13.1-1, 13.1-2	Fig 13.1-1, 43.1-2
13.7-1, 13.7-2, 13.7-3	13.7-1, 13.7-2, 13.7-3

Remove

17.1A-3 through 17.1A-12

17.1A-15 through 17.1A-20

1/1.1A-47/17.1A-48

X1.1A-51/17.1A-52

Fig 17.1A-1/17.1A-2

17.1B-1/17.1B-2

Insert

17.1A-3 through 17.1A-12

17.1A-15 through 17.1A-20

-17.1A-47/17.1A-48

17.1A-51/17.1A-52

_Pig 17.1A-1/17.1A-2 .

17.1B-1/17.1B-2

